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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,246	12/03/2003	Nigel V. Spurr	H0005898	5403

7590

12/30/2005

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EXAMINER

LUGO, CARLOS

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/727,246	Applicant(s) SPURR ET AL	
	Examiner Carlos Lugo	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 22-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to applicant's RCE filed on December 7, 2005.

#### ***Claim Objections***

2. **Claims 22,20 (at page 3), and 34 are objected** to because of the following informalities:

- Claim 22 Line 8, add the word -revolution- after "one".
- Claim 20 at page 3, change "Claim 20" to -Claim 30-.
- Claim 34 Line 1, change "comprises" to -is-.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

- The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 27,30 (see claim objection above), 31,37, and 38 are rejected** under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims recite the limitation "calibration". However, the current specification does not provide a clear explanation of how that calibration is performed by the collected data and what parts of the latch assembly are calibrated.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 22,24-28,31,32,34-38, and 41 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,765,884 to Armbruster.

Regarding claims 22 and 32, Armbruster discloses a latch assembly control system method comprising the steps of integrating a latch assembly (Figure 1) with a motor (53) having at least one gear (26) for actuating a plurality of components of the latch assembly.

Associating a gear tooth sensor (37) with the latch assembly. The gear tooth will sense the movement of at least one of the gear teeth to thereby sense the position of the at least one gear to thereby provide a reference point registration and calibration via the collected data (Col. 5 Line 27 to Col. 6 Line 5).

As to the limitation that the gear will complete less than one revolution to obtain the data, Armbruster illustrates that data will be collected by means of the gear tooth sensor (37) when the gear completes at least one full revolution.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to recollect the data in a shorter time of period, i.e., in less than one full revolution, since it has been held that discovering an optimum value of a

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result effective variable such as to obtain data from the gear in a faster period of time, i.e., in less than one revolution, involves only routine skill in the art.

As to claims 24 and 34, Armbruster discloses that the latch assembly is provided in a vehicle door.

As to claims 25 and 35, Armbruster discloses that the gear tooth sensor is integrated with the latch assembly (Figure 1).

As to claims 26,36 and 41, Armbruster discloses that the system further includes a vehicle management module (35).

As to claims 27 and 37, Armbruster discloses that the sensor will communicate data recollected from the gear.

As to claims 28 and 38, Armbruster discloses that the calibration is made by the vehicle management module (Col. 5 line 58 to Col. 6 Line 5).

As to claim 31, Armbruster discloses that at least one component of the door latch assembly is actuated by the vehicle management module based on data collected from the at least one gear tooth sensor.

7. **Claims 23 and 33 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,765,884 to Armbruster as applied to claims 1 and 11 above, and further in view of US Pat No 5,304,926 to Wu.

Armbruster fails to disclose that the gear tooth sensor comprises at least one magnet located proximate to the gear. Armbruster discloses that the sensor used is a Hall-effect sensor (Claim 1).

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Wu teaches that it is well known in the art to have a Hall sensor wherein the sensor has a magnet located proximate a gear in order to collect data (Figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a sensor with a magnet, as taught by Wu, into a device as described by Armbruster, in order to collect data from the gear.

8. **Claims 29,30,39 and 40 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,765,884 to Armbruster.

Armbruster fails to disclose a plurality of gear tooth sensors to collect data from the gear.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have more than one sensor in a device as Armbruster disclose in order to obtain more accurate data.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number 571-272-7058. The examiner can normally be reached on 9-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-272-7049.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

C.C.

Carlos Lugo  
AU 3676

December 19, 2005

A handwritten signature in black ink, appearing to read "Brian E. Glessner", with a long horizontal flourish extending to the right.

**BRIAN E. GLESSNER**  
**SUPERVISORY PATENT EXAMINER**